

Comparisons of Job Characteristics

Focus Occupation: [Water and Wastewater Treatment Plant and System Operators \(51-8031\)](#)
Associated Occupation: [Environmental Science and Protection Technicians, Including Health \(19-4091\)](#)

[Compare Knowledge](#)
[Compare Skills](#)
[Compare Abilities](#)
[Compare Detailed Work Activities](#)
[Compare Tools and Technologies](#)

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

Knowledge

Similarity of Focus Occupation to Associated Occupation: 80

Focus Occupation: Water and Wastewater Treatment Plant and System Operators (51-8031)

Associated Occupation: Environmental Science and Protection Technicians, Including Health (19-4091)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Computers and Electronics	8.4	13.6	10.2	<<	Extensive education and/or training may be required
Chemistry	4.8	13.2	12.6	0	Current knowledge level may be sufficient
Biology	3.7	11.4	10.9	0	Current knowledge level may be sufficient
Public Safety and Security	6.9	11.1	12.7	>	Current knowledge level is likely sufficient
Physics	4.3	9.9	13.2	>>	Current knowledge level is likely more than sufficient
Law and Government	5.9	9.8	9.4	0	Current knowledge level may be sufficient
Geography	3.9	9.7	6.4	<<	Extensive education and/or training may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 44

Focus Occupation: Water and Wastewater Treatment Plant and System Operators (51-8031)

Associated Occupation: Environmental Science and Protection Technicians, Including Health (19-4091)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Science	4.5	10.3	5.1	<<	Extensive development of skills in this area may be required
Mathematics	6.2	9.2	6.4	<<	Extensive development of skills in this area may be required
Operations Analysis	5.0	7.9	2.7	<<	Extensive development of skills in this area may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities		Similarity of Focus Occupation to Associated Occupation: 86			
Focus Occupation: Water and Wastewater Treatment Plant and System Operators (51-8031)					
Associated Occupation: Environmental Science and Protection Technicians, Including Health (19-4091)					
Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Written Expression	9.8	12.9	9.6	<<	Extensive improvement in abilities may be required
Near Vision	11.1	12.8	11.8	0	Current ability level may be sufficient
Mathematical Reasoning	6.3	9.1	6.4	<<	Extensive improvement in abilities may be required
Number Facility	6.3	9.0	7.2	<	Some improvement in abilities may be required
Rate Control	3.8	6.7	5.9	<	Some improvement in abilities may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common		Similarity of Focus Occupation to Associated Occupation: 68
Focus Occupation: Water and Wastewater Treatment Plant and System Operators (51-8031) Associated Occupation: Environmental Science and Protection Technicians, Including Health (19-4091)		
Work Activities	Exclusivity of Activity	
Collect samples for testing	58	
Direct and coordinate activities of workers or staff	3	
Test materials or solutions	73	
Use laboratory equipment	60	
Use precision measuring tools or equipment	17	

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Tools and Technologies that Both Occupations Have in Common		Similarity of Focus Occupation to Associated Occupation: 75
Focus Occupation: Water and Wastewater Treatment Plant and System Operators (51-8031) Associated Occupation: Environmental Science and Protection Technicians, Including Health (19-4091)		
Tools and Technologies	Exclusivity	

Business function specific software	1
Cameras	2
Computers	1
Content management software	6
Data management and query software	1
Electrochemical measuring instruments and accessories	9
Gas analyzers and monitors	10
Industry specific software	1
Light and wave generating and measuring equipment	4
Liquid and solid and elemental analyzers	19
Pumps	9
Sampling equipment	12
Spectroscopic equipment	10
Water treatment and supply equipment	21

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.